Claims

1. A method for managing streaming media content, the method comprising:

accessing a first playlist that has a non-canonical data format;

providing a plurality of translators that translate playlists from a plurality of different non-canonical formats to a canonical format;

calling one of the translators to translate the first playlist into the canonical format, forming a second playlist in the canonical format; and

retrieving media content referenced by the second playlist.

2. A method as recited in claim 1, wherein retrieving media content referenced by the second playlist further comprises:

streaming content referenced by the second playlist to a client device that is operatively coupled to the computer.

3. A method as recited in claim 1, wherein the method is performed by a particular computer, and wherein retrieving media content referenced by the second playlist further comprises:

rendering/playing the content referenced by the second playlist in a manner that the particular computer itself is a client for the content.

4. A method as recited in claim 1, wherein forming a second playlist in the canonical format comprises:

dynamically generating a data structure comprising the second playlist, the data structure being used to manage streaming content referenced by the second playlist.

5. A method as recited in claim 1, further comprising dynamically interrupting a particular media item as it is being streamed from the second playlist.

6. A method as recited in claim 1, further comprising dynamically streaming a different set of media content to a client, the different media content not being represented in the second playlist.

7. A method as recited in claim 1, wherein the server and the plurality of translators are COM objects.

8. A method as recited in claim 1, wherein the canonical playlist format is a SMIL data format.

9. A method as recited in claim 1, further comprising using a SMIL interface to create the second playlist.

10. A method as recited in claim 1, further comprising:

providing one or more transformers that impose respective policies on content referenced by the first playlist; and,

notifying at least one of the one or more transformers to impose a policy on the content referenced by the second playlist.

11. A method as recited in claim 10, wherein imposing the policy results in a modification to the second playlist, the modification being selected from a group of modifications comprising (a) removing a reference from the second playlist, (b) adding a reference to the second playlist, (c) changing the order of references in the second playlist; and (d) modifying a reference to content in the second playlist.

12. A method as recited in claim 10, wherein the one or more transformers is a COM object.

13. A method as recited in claim 1, further comprising:

modifying, by a supervisory component, the second playlist while streaming the media referenced by the second playlist, the modification being selected from a group of modifications comprising: (a) inserting a new reference into the second playlist, (b) deleting a reference from the second playlist, (c) changing the order of the references; and (d) modifying a reference in the second playlist.

14. A method as recited in claim 13, wherein the modifying comprises dynamically interrupting a particular media item as it is being streamed to insert another media item.

15. A method as recited in claim 13, the operations further comprise:

dynamically interrupting a particular media item as it is being streamed;

streaming another media item; and

resuming a set of operations specified by the second playlist.

16. A method as recited in claim 13, wherein the supervisory components is a COM object.

17. A method for managing streaming media content, the method comprising:

accessing a playlist;

imposing a policy on the content referenced by the playlist in a manner that is independent of a modification to the playlist, wherein imposing the policy results in a particular set of media references; and

retrieving media content referenced by the particular media references;

18. A method as recited in claim 17, wherein imposing the policy further comprises:

removing a media content reference, adding a media content reference, changing an order of media content references, and/or modifying a media content reference.

19. One or more computer-readable media comprising computer executable instructions implementing the method of claim 17.

20. A computer-readable media comprising computer-executable instructions to manage streaming media content, the computer program instructions comprising:

a playlist server component that uses a canonical playlist to represent playlists, the represented playlists having a canonical format;

a plurality of translator components that are provided for use by the playlist server component, wherein the translator components accept non-canonical playlists having non-canonical formats, and translate them to the canonical format;

wherein the playlist server performs operations comprising:

receiving a non-canonical playlist;

providing the non-canonical playlist to one of the translator components to translate the non-canonical playlist into the canonical format for addition to the canonical playlist; and;

streaming media referenced by the canonical playlist.

21. A computer-readable media as recited in claim 20, wherein at least one subset of the translator components are provided for use by the playlist server component independent of any modification to the playlist server component.

22. A computer-readable media as recited in claim 20, wherein the playlist server performs operations further comprising dynamically interrupting a particular media item as it is being streamed from the second playlist.

23. A computer-readable media as recited in claim 20, wherein the playlist server performs operations further comprising dynamically streaming a different set of media content to a client, the different media content not being represented in the second playlist.

24. A computer-readable media as recited in claim 20, wherein the canonical data format is SMIL data format.

25. A computer-readable media as recited in claim 20, wherein the components comprise Component Object Model (COM) objects.

26. A computer-readable media as recited in claim 20, wherein the components further comprise:

a supervisory component that communicates with the playlist server component to dynamically modify the canonical playlist while the playlist server component streams the content referenced by the canonical playlist.

27. A computer-readable media as recited in claim 26, wherein the supervisory component uses a graphical user interface to visualize and manually manipulate elements and attributes of the canonical playlist.

28. A computer-readable media as recited in claim 20 the components further comprising:

a playlist transformation component that receives a playlist and imposes a content policy on the playlist; and

wherein the server performs a further operation of providing the second playlist to the playlist transformation component to impose the policy on the content referenced by the second playlist.

29. A computer-readable media as recited in claim 28, wherein providing the second playlist to the playlist transformation component results in a modification to the second playlist, the modification being selected from a group of modifications comprising removing a reference from the second playlist, adding a reference to the second playlist, changing the order of the playlist references, and modifying a reference in the second playlist.

30. A computer comprising a processor configured to execute the computer program instructions of the computer-readable media of claim 20.

31. A computer for managing media content, comprising:

a processor coupled to a memory comprising computer-executable instructions, the processor being configured to fetch and execute the computer-executable instructions, the computer-executable instructions comprising instructions for:

accessing a first playlist that has a non-canonical format;

providing a plurality of translators to translate playlists from a plurality of different native data formats to a canonical data format; and

invoking one of the translators to translate the first playlist into the canonical data format, forming a second playlist that is based on the canonical data format.

32. A computer as recited in claim 31, wherein the computer-executable instructions further comprise instructions for:

streaming content referenced by the second playlist to a client device that is operatively coupled to the computer.

33. A computer as recited in claim 31, wherein the computer-executable instructions further comprise instructions for:

rendering/playing the content referenced by the second playlist in a manner that the computer itself is a client for the content.

34. A computer as recited in claim 31, wherein the server and the plurality of translators are COM objects.

35. A computer as recited in claim 31, wherein the computer-executable instructions further comprise instructions for:

dynamically interrupting a particular media item as it is being streamed.

36. A computer as recited in claim 31, wherein the computer-executable instructions further comprise instructions for:

dynamically streaming a different set of media content, the different media content not being represented in the second playlist.

37. A computer as recited in claim 31, wherein the computer-executable instructions further comprise instructions for:

interrupting a particular media item as it is being streamed;

streaming another media item; and

resuming a set of operations specified by the second playlist.

38. A computer as recited in claim 31, wherein the canonical playlist format is a SMIL data format.

39. A computer as recited in claim 31, wherein a SMIL interface is used to form the second playlist.

40. A computer as recited in claim 31, wherein the processor is further configured to perform operations comprising:

providing a plurality of transformers that impose respective policies on content referenced by the first playlist; and,

notifying one of the transformers to impose a policy on content referenced by the second playlist.

41. A computer as recited in claim 40, wherein imposing the policy results in a modification to the second playlist, the modification being selected from a group comprising (a) removing a reference from the second playlist, (b) adding a reference to the second playlist, (c) changing the order of references in the second playlist, and (d) modifying a reference in the second playlist.

42. A computer as recited in claim 40, wherein the server and the plurality of transformers are COM objects. A server computer as recited in claim 40, wherein the server and the plurality of transformers are COM objects.

43. A computer as recited in claim 31, wherein the processor is further configured to perform an operation comprising:

dynamically modifying the second playlist while streaming the media referenced by the second playlist, the modification being selected from a group of modifications comprising (a) inserting a new reference into the second playlist, (b) deleting a reference from the second playlist, (c) changing the order of the references; and (d) modifying a reference in the second playlist.

44. A computer as recited in claim 43, wherein the dynamically modifying further comprises interrupting a particular media item as it is being streamed to stream a different media item.